

Influenza

FACT SHEET

What is influenza?

Influenza is a highly contagious respiratory illness caused by a virus. Three specific influenza virus strains are responsible for illness in humans. Influenza type A and type B viruses cause moderate to severe illness in humans, and type C may cause no symptoms or only a mild respiratory illness. Influenza types A and B viruses circulate almost every winter. Each influenza type has a different nuclear make up. Type A influenza generally causes moderate to severe illness and infects both humans and animals such as pigs and birds. Type B only affects humans, primarily affects children and generally causes milder illness than influenza A. Influenza season usually begins in October and continues thru the following May, but tends to peak between November and March. Influenza can occur throughout the year particularly in tropical areas, but in temperate regions like the United States, influenza tends to occur in the fall and winter. In the Southern Hemisphere, influenza generally peaks from April through September. Travelers also can get the flu during the summer, especially when traveling to areas of the world where the flu is active.

What are the symptoms?

The abrupt onset of fever often associated with headache, extreme tiredness, dry cough, sore throat, nasal congestion, and body aches are characteristic of influenza illness. Occasionally, intestinal symptoms such as nausea, vomiting, diarrhea, and abdominal pain may be present (especially in children), but should not be confused with the “stomach flu.”

How is influenza spread?

Influenza is spread from person-to-person by direct contact with the airborne particles or large droplets from the respiratory tract of an infected person. When someone who is infected with influenza coughs, sneezes, talks or sings, the virus is expelled into the air, and the droplets drift and or settles on objects in the environment. Transmission of the virus occurs when you breathe the particles or large droplets, or when you touch objects recently contaminated with influenza virus and then touch your nose or mouth. Avoiding or limiting contact with those infected with influenza, washing your hands often, using tissues to catch sneezes and coughs, and getting a flu shot each year reduces your risk of infection and serious influenza related illness.

How soon do symptoms appear?

Symptoms of influenza usually appear one to five days after exposure and generally last from two to five days with a rapid recovery. Cough and decreased strength may linger for two weeks or longer.

How long can a person spread influenza?

Persons are most contagious during the 24 hours before symptoms appear and five days or so thereafter.

How is influenza diagnosed?

Health care providers often diagnose influenza based on symptoms alone. Influenza virus can also be detected in specimens collected from the nose or throat by specific laboratory procedures such as viral culture or rapid influenza diagnostic antigen testing. *Rapid* influenza tests are now available for use in health care providers' offices.

What is the treatment?

Basic treatment includes bed rest, fluids, and over-the-counter medications for the relief of symptoms such as: a runny nose, cough, sore throat, fever, and body aches. Infants, children, or teenagers **should not use aspirin** to treat influenza symptoms because of the risk for developing Reye Syndrome, a serious condition associated with the use of aspirin during the course of a viral illness.

Antiviral medications may prevent or reduce the severity and shorten the duration of influenza. Amantadine and rimantadine have been approved for the prevention and treatment of influenza A. Oseltamivir and zanamivir has been approved for the prevention and treatment of influenza A and B. Antiviral medications require a prescription, may have side effects and are not appropriate for everyone. There are guidelines governing the age appropriate use of these antivirals in children. Consult your health care provider as to whether or not anti-viral medication is right for you and your family.

How serious is influenza?

Generally, influenza runs a predictable course over two to seven days. Although a cough and malaise may persist for a couple of weeks, the illness is generally self-limiting and recovery is complete. Influenza can be especially serious for infants, the immunocompromised, the elderly, and anyone with underlying cardiac, respiratory, or other serious health conditions. On average, 1,000 deaths occur each year in Missouri because of influenza related complications. Complications generally associated with influenza include: bronchitis, viral pneumonia, secondary bacterial pneumonia, aggravation of asthma, congestive heart failure, diabetes and other chronic illnesses, and sinus and ear infections.

Can influenza be prevented?

When the influenza vaccine matches the influenza strains in circulation, it is 70% to 90% effective in preventing illness among healthy adults under the age of 65. It is 30% to 70% effective in preventing hospitalization for pneumonia and influenza complication among the elderly living outside of nursing or chronic care facilities. It is 50% to 60% effective in preventing hospitalization and pneumonia, and 80% effective in preventing death among the elderly living in nursing or chronic care facilities.

Influenza vaccine is updated annually to match the circulating strain as closely as possible. Annual vaccination provides immunity for approximately one year.

During community outbreaks of influenza, persons who are unable to take the influenza vaccine may use antiviral medications. Antiviral medications are also indicated when outbreaks are caused by a variant strain of influenza type A that might not be controlled by the vaccine.

When is the influenza vaccine given?

The vaccine should be taken each fall, from October through November. Vaccination may continue into December and throughout the influenza season, even after influenza has come to your community. However, to avoid missed opportunities for vaccination, vaccine should be offered to high-risk persons who are hospitalized or seen at their physician's office starting in September and continuing through the winter. **It takes about one to two weeks after vaccination for antibody against influenza to develop and provide protection.**

How safe is influenza vaccine?

The Influenza vaccine does not contain live viruses, so it cannot cause influenza. The most common reaction is soreness where the shot was given. Some persons may have muscle aches, tiredness, and low-grade temperature for one to two days.

Who should get influenza vaccine?

1. Persons who have a greater risk for developing complications from influenza, include:
 - Persons aged 65 years and older
 - Persons living in nursing or other chronic-care facilities
 - Adults and children with chronic heart or lung conditions, including children with asthma
 - Adults and children who are immunosuppressed for any reason, including immunodeficiency (HIV) virus or who are taking certain medications
 - Adults and children who require regular medical follow-up because of chronic metabolic disease (including diabetes mellitus), kidney disease, or blood disorders
 - Children and teenagers, aged six months to 18 years, who are receiving long-term aspirin therapy and might be at risk for developing Reye syndrome after influenza
 - Women who will be in the second or third trimester of pregnancy during the influenza season
 - Persons who are aged 50-64 years of age may be at increased risk of developing complications from influenza because of known or unknown underlying medical conditions
2. Persons who can spread influenza to those who are at risk of developing complications from influenza:
 - Persons who live with or care for high-risk individuals
 - Out of home caretakers and contacts of children aged 0-23 months
 - Health care workers, physicians, staff and volunteers of health care facilities and home health agencies
 - Public-safety workers such as, police, firefighters, and emergency medical technicians
 - Healthy children six months to 23 months are at increased risk of influenza-related hospitalization, and should be considered for vaccine when feasible

(Consultation with your physician is advised prior to administration of the vaccine). Vaccine safety has not been established for children less than six months of age and is not recommended.

3. Persons who want the vaccine:

- College and university students and travelers to foreign countries
- Persons who wish to avoid influenza illness

Who should NOT get influenza vaccine?

Persons having the following conditions should NOT receive the influenza vaccine:

- Persons who have had a severe allergic reaction to one of the influenza vaccine components following a prior dose; such as thimerosal or eggs
- Persons who have had severe reactions, such as hives or swelling of the lips, or tongue, after eating eggs should consult their health care provider before considering the influenza vaccine
- Fever or an active infection
- Persons with a history of Guillain-Barre' Syndrome should consult their health care provider before receiving the influenza vaccine

For more information about influenza, ask your physician or health care provider, pharmacist or contact your Local Health Department or DHSS at:

**Missouri Department of Health and Senior Services
Section for Communicable Disease Prevention
Phone: (866) 628-9891 or (573) 751-6113**